#### NL INDUSTRIES/TARACORP SUPERFUND SITE GROUP

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May 9, 2017

#### By Electronic Mail and First Class Mail

Ms. Sheri L. Bianchin Remedial Project Manager Institutional Controls Coordinator U.S. Environmental Protection Agency Region 5 77 West Jackson Boulevard (SR-6J) Chicago, IL 60604

Re: NL Industries/Taracorp Superfund Site; Granite City, Illinois First 2017 Semi-Annual Operation and Maintenance Inspection (May 2017)

Dear Ms. Bianchin:

On behalf of the NL Industries/Taracorp Superfund Site Group (Group), enclosed are copies of the log sheets, notes, and reproductions of photographs documenting the results from the first 2017 semi-annual operation and maintenance inspection performed on May 3, 2017 at the NL Industries/Taracorp Superfund Site in Granite City, Illinois. The results of the inspection are summarized on the log sheets which are attached.

Several items of note from the inspection are listed as follows:

- At Slough Road (as shown on Figure 1 and the photographs in Attachment 1), I met with Mr. Earl Boyd, Terminal Manager for Beelman River Terminals, Inc. (Beelman), who confirmed that there has been no disturbance to the paved surface of Slough Road (which is no longer visible) since the time the paved roadway was covered with soil fill as part of the expansion of Beelman's operations.
- The paved portion of Watson Alley in Eagle Park Acres (as shown on Figure 2 and the photographs in Attachment 2) was inspected and noted to be in good condition.
- Three remote fill properties (200 Harrison Street, 206 Terry Street, and 200 Allen Street) in Eagle Park Acres (Figure 3) that were previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of three feet below the ground surface) were observed during the inspection. As shown on the photographs in Attachment 3, the properties are vacant and no evidence of subsurface soil disturbance was observed.
- Alleys in Venice that were paved during remedial activities were inspected and noted to be in generally good condition, with some minor cracking and deterioration observed in some

Mr. Sheri Bianchin May 9, 2017 Page 2

areas, with no battery case chips visible. The Venice alleys are shown on Figure 1 and are identified on the photographs in Attachment 4. Previous inspections have confirmed that the local municipality is continuing to repair and repave alleys, as necessary (Attachment 4, photograph 9).

- Observations at the Taracorp pile cap and main industrial site are shown on the photographs provided in Attachment 5. As previously reported, All Pallet Service, Inc. (the operator of the pallet recycling company on the 1459-1500 State Street properties (e.g., the State Street Warehouse properties) previously repaired the security fence near its operations to address the damage observed during the June 2016 semi-annual operation and maintenance inspection. Following the May 2017 inspection, All Pallet Service, Inc. was again notified of the need to exercise care in its pallet storage/handling activities, which have caused some bent fencing in several areas (Attachment 5, photographs 27-34), and to repair the fence and cleanup debris in those areas. No problems related to the Taracorp pile cap or the warning signs on the fences were observed. Also, due to the rainfall at the time of the inspection, the concrete surface water drainage channel was observed to be effectively conveying stormwater runoff away from the Taracorp pile.
- As shown on the photographs in Attachment 6, no evidence of disturbance of the soil cover was observed at Schaeffer Road (a remote fill property remediated by EPA where leadimpacted soil and/or battery case chips may remain in place at a depth below three feet).
- At Sand Road (a remote fill property remediated by EPA where lead-impacted soil and/or battery case chips may remain in place at a depth below three feet), most of the property was submerged under water (Attachment 7, photographs 1-4) due to recent rainfall, except the foundation area of the former building where scattered battery case chips are visible on the ground surface. No evidence of disturbance of the soil cover was observed.

Please let me know if you have questions or if additional information or clarification is needed at this time.

Very truly yours,

LEED ENVIRONMENTAL, INC.

Project Coordinator

attachments

cc: Ms. Erin Rednour/Mr. Tom Miller – Illinois Environmental Protection Agency (w/attachments, by electronic mail)

Technical Committee, NL Industries/Taracorp Superfund Site Group (w/attachments, by electronic mail)

#### **NL Industries/Taracorp Superfund Site Inspection Log - Operation and Maintenance**

Inspector's Name/Company: Jeff Leed, Leed En Site Structure	Inspected		Maintenance Work
	(yes/no)		Performed or Required
Security Fence:	<u> </u>		
Gates/locks secure and operative	Yes	Gate near 16th and State Streets was locked at the time of the inspection. The gate and lock were secure and operative.	
Evidence of rust, cuts, deterioration	Yes	No significant rust, cuts, or deterioration. Several bent fence posts (Attachment 5, photographs 27-34), associated with the operations of All Pallet Service on the neighboring property, were observed.	Mr. Justin Shrum, the owner/operator of All Pallet Service, was notified and will repair the bent fence.
Evidence of unauthorized entry	Yes	No evidence of unauthorized entry.	
Burrowing or tunneling under fence	Yes	No evidence of burrowing or tunneling under fence.	
Damaged barbed wire	Yes	No evidence of damaged barbed wire.	
Comments			
Warning Signs:			
Warning signs (on fence around 1555 State Street property and Taracorp pile property)	Yes	In October 2014, the Group's contractor, TNT Fence Company, installed five warning signs on the perimeter security fence: (1) one sign along State Street adjacent to the locked gate near State Street and 16th Street; (2) two other signs along State Street; (3) one sign along the railroad tracks near the intersection of 16th Street and Edison Avenue; and (4) one sign near the Metalico/Mayco property. No problems with the signs were identified during the May 2017 inspection.	
Evidence of rust, cuts, deterioration, or other damage	Yes	No evidence of rust, cuts, deterioration, or other damage.	
Evidence of tampering	Yes	No evidence of tampering.	
Comments		The critical of mapping.	
Access Road:			
Evidence of settlement or deterioration	Yes	No evidence of settlement, deterioration, or other problems to access roads at main industrial site.	
Comments			
Landfill Cover - Vegetation:			
Establishment of grass from initial seeding	Yes	Grass/vegetation is well established over the entire Taracorp pile cap and main industrial site. Crown vetch is abundant.	The Group's contractor, Munie Greencare Professionals, cut the vegetation on the 1555 State Street property, excluding the Taracorp pile cap, on April 19, 2017. Herbicide was applied on April 20, 2017 to control the growth of vegetation on the fence.
Adequate growth of vegetation	Yes	Vegetation is abundant and thick across the entire site.	
Evidence of stress	Yes	No evidence of stress.	
Presence of trees/shrubs	Yes	No small bushes/trees were observed on the Taracorp pile cap.	
Need for mowing/maintenance	Yes	No current need for maintenance on the Taracorp pile cap.	
Comments			1
Landfill Cover – Erosion		<u> </u>	
Evidence of erosion	Yes	No erosion evident.	
Indicate areal extent and location			
Comments			

Inspection Date: 5/3/2017

#### NL Industries/Taracorp Superfund Site **Inspection Log - Operation and Maintenance**

Inspector's Name/Company: Jeff Leed, I	Leed Environmen	Weather: 47°F, heavy rain and wind	
Site Structure	Inspected (yes/no)	Inspection Observations	Maintenance Work Performed or Required
Landfill Cover – Settlement			
Evidence of settlement	Yes	No settlement evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Cracks			
Evidence of cracks	Yes	No cracks evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Bulges			
Evidence of bulges	Yes	No bulges evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Ponding			
Evidence of ponding	Yes	No ponding evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Seeps			
Evidence of seepage (leachate)	Yes	No seepage evident.	
Indicate areal extent and location			
Comments			
Landfill Cover – Slope Stability			
Evidence of sliding	Yes	No sliding evident.	
Indicate areal extent and location			
Comments			
Leachate Management System			
Riser pipe and locks	Yes	Riser pipe clean and in good condition. The lid on the riser pipe was locked.	
Leachate levels in sump	No	EWI removed leachate from the sump in June 2014 as part of the five-year review groundwater monitoring event.	
Necessary sampling activities	No		
Necessary leachate disposal	No		
Comments			

Inspection Date: 5/3/2017

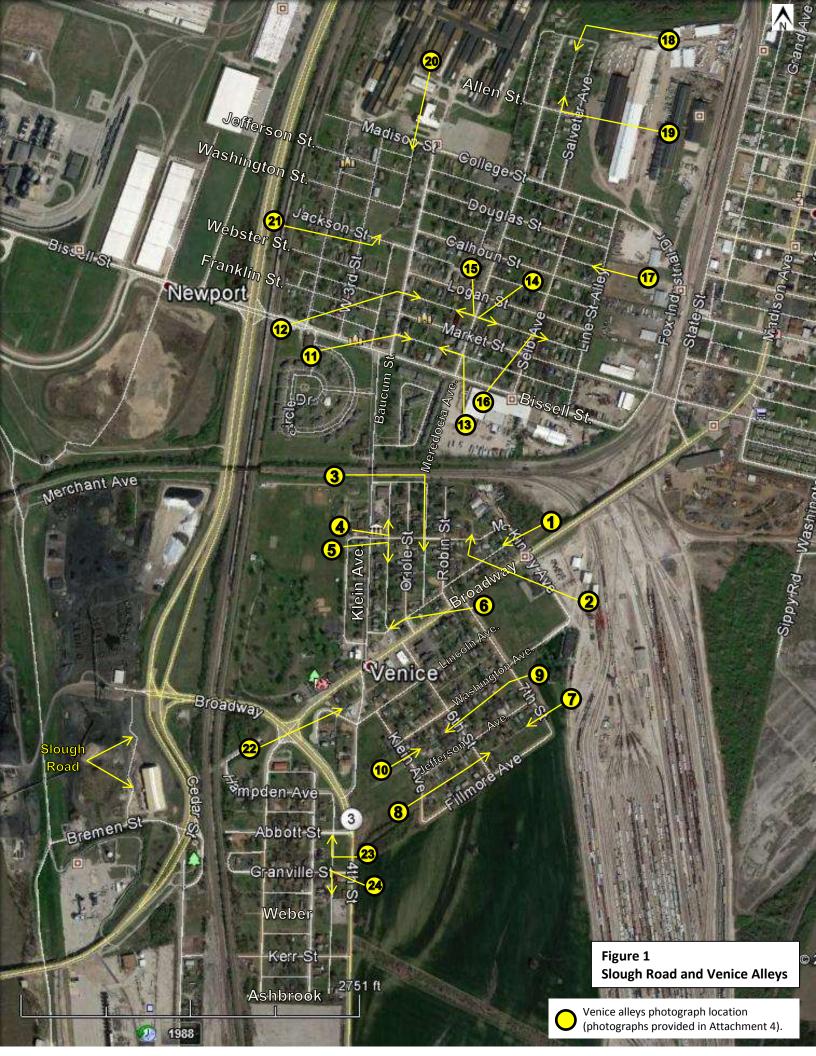
#### **NL Industries/Taracorp Superfund Site Inspection Log - Operation and Maintenance**

Inspector's Name/Company: Jeff Leed, Leed Environmental, Inc.			Weather: 47°F, heavy rain and wind
Site Structure	Inspected (yes/no)	Inspection Observations	Maintenance Work Performed or Required
Concrete Drainage Channel			
Evidence of cracks or obstructions	Yes	No significant cracks or obstructions. Due to heavy rain at the time of the inspection, the concrete drainage channel was observed to be effective in conveying storm water runoff away from the Taracorp pile.	
Areas of erosion	Yes	No erosion observed.	
Comments			
Asphalt Covers - Integrity	•		
Evidence of broken asphalt or fissures		Some minor asphalt cracking and deterioration was observed in small areas along the sides of several paved alleys in Venice. Evidence of recent paving / patching of the alleys by Venice Township was observed along 6th Street (Attachment 4, photograph 9).	
Indicate areal extent and location			
Comments			

#### Other Notes/Observations:

- 1. At Slough Road (Figure 1) and as shown on the photographs in Attachment 1, Mr. Earl Boyd, Terminal Manager for Beelman River Terminals, Inc., confirmed that there has been no disturbance to the paved surface of Slough Road (which is no longer visible) since the time it was covered with soil fill.
- 2. The paved portion of Watson Alley in Eagle Park Acres (as shown on Figure 2 and the photographs in Attachment 2) was inspected and noted to be in good condition.
- 3. Three remote fill properties (200 Harrison Street, 206 Terry Street, and 200 Allen Street) in Eagle Park Acres (Figure 3) that were previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of 3 feet below ground surface) were observed during the inspection. As shown on the photographs in Attachment 3, the properties are vacant and no evidence of subsurface soil disturbance was observed.
- 4. Alleys in Venice that were paved during remedial activities were inspected and noted to be in generally good condition with some minor cracking and deterioration observed in some areas. The Venice alleys are shown on Figure 1 and are identified on the photographs in Attachment 4.
- 5. Photographs showing the Taracorp pile cap and main industrial site are provided in Attachment 5. Vegetation is thick and abundant on the Taracorp pile cap. Observations related to the Taracorp pile cap and main industrial site (as shown on the photographs provided in Attachment 5) are summarized above.
- 6. Remote fill properties (Schaeffer Road and Sand Road) previously remediated by EPA (and where lead-impacted soil and/or battery case chips may remain in place at a depth of three feet below ground surface) were observed during the inspection. Photographs are provided in Attachment 6 and Attachment 7, respectively. There was no evidence of soil disturbance at Schaeffer Road. Due to heavy rain, most of Sand Road was submerged under water, except for the foundation area of the former building. Scattered battery case chips and some other debris (bricks, etc.) are evident near the foundation of the former building.

Inspection Date: 5/3/2017







#### Attachment 1 Slough Road Photographs May 3, 2017



Photograph 1: Beelman operations, rebar storage.



Photograph 2: Beelman warehouse.



Photograph 3: Slough Road, inside of fence along Bremen Street.



Photograph 4: Slough Road, inside of gate/fence along Bremen Street.



Photograph 5: Slough Road, inside of gate/fence along Bremen Street.



Photograph 6: Slough Road, concrete debris pile.

#### Attachment 1 Slough Road Photographs May 3, 2017



Photograph 7: Slough Road, concrete debris, foundation of former Robin's Nest Lounge.



Photograph 8: Slough Road, concrete debris, foundation of former Robin's Nest Lounge.



Photograph 9: Slough Road, roadway.



Photograph 10: Slough Road, roadway.



Photograph 11: Beelman operations.



Photograph 12: Beelman operations, rebar storage.

#### Attachment 1 Slough Road Photographs May 3, 2017



Photograph 13: Fence along Route 3 (Beelman warehouse).



Photograph 14: Sough Road outside of fence/gate along Bremen Street.



Photograph 15: Slough Road, outside of gate along Bremen Street.



Photograph 16: Slough Road, outside of gate along Bremen Street.



Photograph 17: Slough Road, outside of gate along Bremen Street.



Photograph 18: Slough Road, fence along south side of property.

## Attachment 2 Eagle Park Acres – Watson Alley Photographs May 3, 2017



Photograph 1: Watson Alley, gravel area.



Photograph 2: Watson Alley, gravel area.



Photograph 3: Watson Alley, gravel area.



Photograph 4: Watson Alley, paved area (view from Harrison Street).



Photograph 5: Watson Alley, paved area (view from Harrison Street).



Photograph 6: Watson Alley, paved area (view from Watson Street).

## Attachment 3 Eagle Park Acres Remote Fill Properties Photographs May 3, 2017



Photograph 1: 200 Harrison, also known as 200 Roosevelt Street (view from Roosevelt Street).



Photograph 2: 200 Allen Street (view from Allen Street).



Photograph 3: 200 Allen Street (view from Terry Street).



Photograph 4: 206 Terry Street (view from Terry Street).



Photograph 5: 206 Terry Street (view from Terry Street).



Photograph 1: Alley at McKinley Street near Broadway.



Photograph 2: Alley at McKinley Street and Brown Street (view north).



Photograph 3: Alley between Robin Street and Oriole Street (view south).



Photograph 4: Alley between Oriole Street and Klein Avenue (view north).



Photograph 5: Alley (gravel) between Oriole Street and Klein Avenue (view south).



Photograph 6: Alley between Broadway and Oriole Street (view southwest).



Photograph 7: Alley between Fillmore Avenue and Jefferson Street.



Photograph 8: Alley between Jefferson Street and Fillmore Street (view northeast from 6<sup>th</sup> Street).



Photograph 9: Alley between Jefferson Street and Washington Street (view southwest from 6<sup>th</sup> Street).



Photograph 10: Alley between Jefferson Street and Washington Street (view northeast from Klein Street).



Photograph 11: Alley between Bissell Street and Market Street (view east from Baucum Street).



Photograph 12: Alley between Market Street and Logan Street (view east from Baucum Street).



Photograph 13: Alley between Bissell Street and Market Street (view west from Meredocia Street).



Photograph 14: Alley between Market Street and Logan Street (view east from Meredocia Street).



Photograph 15: Alley between Market Street and Logan Street (view west from Meredocia Street).



Photograph 16: Alley between Market Street and Logan Street (view east from Selb Street).



Photograph 17: Alley between Calhoun Street and Douglas Street (view west from Line Alley); several holes have been filled with asphalt since June 2012 inspection.



Photograph 18: Alley between Salveter Street and Meredocia Street (view south from Rogan Street).



Photograph 19: Alley between Allen Street and Rogan Street (view north from Allen Street).



Photograph 20: Alley between Baucum Street and West 3<sup>rd</sup> Street (view south from Madison Street and College Street).



Photograph 21: Alley on Jackson Street (between 3<sup>rd</sup> Street and Baucum Street).



Photograph 22: Alley between 4<sup>th</sup> Street, Broadway, and Lincoln Avenue.



Photograph 23: Alley (gravel) between 3<sup>rd</sup> Street and 4<sup>th</sup> Street (view north from Abbott).



Photograph 24: Alley between 3<sup>rd</sup> Street and 4<sup>th</sup> Street (view south from Granville).



Photograph 1: Entrance to 1555 State Street property along State Street.



Photograph 2: Warning sign at front gate along State Street.



Photograph 3: Concrete drainage swale, east side of Taracorp pile (view north).



Photograph 4: End of concrete drainage swale, east side of Taracorp pile.



Photograph 5: Concrete drainage swale, east side of Taracorp pile (view north).



Photograph 6: Concrete drainage swale, east side of Taracorp pile (view north).



Photograph 7: Concrete drainage swale, north side of Taracorp pile (view southeast).



Photograph 8: Concrete drainage swale, fence, and vegetation; north side of Taracorp pile along 16<sup>th</sup> Street (view northwest).





Photographs 9 and 10: Concrete drainage swale, fence, and vegetation; north side of Taracorp pile along 16<sup>th</sup> Street (view northwest).



Photograph 11: Concrete drainage swale and vegetation, northwestern side of Taracorp pile (view northeast).



Photograph 12: Vegetation, northwestern side of Taracorp pile cap (view southwest).



Photograph 13: Concrete drainage swale, fence, and vegetation along northwestern side of Taracorp pile (view southwest).



Photograph 14: Concrete drainage swale, fence, and vegetation along northwestern side of Taracorp pile (view southwest).





Photographs 15 and 16: Concrete drainage swale, crack in concrete along northwestern side of Taracorp pile.



Photograph 17: Concrete drainage swale, vegetation along northwestern side of Taracorp pile (view north/northeast).



Photograph 18: Fence, warning sign, and gate western side of Taracorp pile (view southwest).



Photograph 19: Vegetation near base of west side of Taracorp pile (view northeast).



Photograph 20: Fence, gate, and warning sign along western side of Taracorp pile (view northwest).



Photograph 21: Vegetation near base of western side of Taracorp pile (view north).



Photograph 22: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 23: Vegetation along western side of Taracorp pile (view north).



Photograph 24: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 25: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view north).



Photograph 26: Concrete drainage swale and vegetation near base of western side of Taracorp pile (view south).



Photograph 27: Fence and concrete drainage swale (southwestern side of Taracorp pile cap).



Photograph 28: Fence and concrete drainage swale (southwestern side of Taracorp pile cap).



Photograph 29: Vegetation near base of southwestern side of Taracorp pile (view northwest).



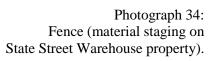
Photograph 30: Fence and concrete drainage swale (southwestern side of Taracorp pile cap).



Photograph 31: Fence (material staging on State Street Warehouse property).



Photograph 32: Fence (material staging on State Street Warehouse property).





Photograph 33: Fence (material staging on State Street Warehouse property).





Photograph 35: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 36: Vegetation and concrete drainage swale along southern slope of Taracorp cap pile (view west).



Photograph 37: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 38: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 39: Concrete drainage swale along southern slope of Taracorp pile.



Photograph 40: Vegetation along southeast side of Taracorp pile cap (view northeast).



Photograph 41: Southern side of Taracorp pile (view west).



Photograph 42: Stormwater outlet.



Photograph 43: Stormwater outlet.



Photograph 44: Stormwater outlet.



Photograph 45: Stormwater manhole near fence.



Photograph 46: Vegetation and fence near former Rich Oil facility (view toward State Street).



Photograph 47: Vegetation, southern side of Taracorp Photograph 48: Vegetation, eastern side of Taracorp pile cap.



pile cap.



Photograph 49: Crown vetch, eastern side of Taracorp pile cap.



Photograph 50: Crown vetch, eastern side of Taracorp pile cap.



Photograph 51: Leachate riser pipe.



Photograph 52: Locked lid on leachate riser pipe (locked lid installed fall 2007).



Photograph 53: Vegetation near fence along railroad tracks.



Photograph 54: Older and newer fence near former BV&G Truck Service buildings along railroad tracks (view northeast).



Photograph 55: Older and newer fence near former BV&G Truck Service buildings along railroad tracks (view northwest).



Photograph 56: Inside fence, corner of State Street and 16<sup>th</sup> Street.



Photograph 57: Inside fence, view south along State Street



Photograph 58: Concrete entranceway gate near 16<sup>th</sup> and State Streets.



Photograph 59: Fence, grass, and sidewalk along State Street.



Photograph 60: Fence, grass, and sidewalk along State Street.



Photograph 61: Fence, grass, and sidewalk along State Street.



Photograph 62: Warning sign along State Street.



Photograph 63: Warning sign along State Street.



Photograph 64: Southern end of concrete sidewalk on 1555 State Street property (adjacent to former Rich Oil property).



Photograph 65: Southern end of concrete sidewalk on 1555 State Street property (adjacent to former Rich Oil property).



Photograph 66: Former Rich Oil property.



Photograph 67: Fence, grass, sidewalk along State Street.



Photograph 68: Fence, grass, sidewalk along State Street.



Photograph 69: Disturbed soil at base of utility pole along State Street.



Photograph 70: Fence, grass, sidewalk along State Street.



Photograph 71: End of sidewalk along railroad tracks.



Photograph 72: End of sidewalk along railroad tracks.



Photograph 73: End of sidewalk along railroad tracks.



Photograph 74: Fence at 16<sup>th</sup> and State Streets.



Photograph 75: Gas utilities along railroad tracks.



Photograph 76: Warning sign on fence along railroad tracks near 16<sup>th</sup> Street and Edison Avenue.



Photograph 77: Warning sign on fence along railroad tracks near 16<sup>th</sup> Street and Edison Avenue.



Photograph 78: Fence and vegetation along railroad tracks and 16<sup>th</sup> Street.



Photograph 79: Fence and vegetation along railroad tracks and 16<sup>th</sup> Street.



Photograph 80: Monitoring well, fence, and vegetation along railroad tracks and 16<sup>th</sup> Street.

#### Attachment 6 Schaeffer Road Photographs May 3, 2017



Photograph 1: Schaeffer Road property.



Photograph 2: Schaeffer Road property.



Photograph 3: Schaeffer Road property.



Photograph 4: Schaeffer Road property.



Photograph 5: Schaeffer Road property.



Photograph 6: Schaeffer Road property.

#### Attachment 6 Schaeffer Road Photographs May 3, 2017



Photograph 7: Schaeffer Road property.



Photograph 8: Schaeffer Road property.



Photograph 9: Schaeffer Road property.



Photograph 10: Schaeffer Road property.



Photograph 11: Schaeffer Road property.



Photograph 12: Schaeffer Road property.

### Attachment 7 Sand Road Photographs May 3, 2017



Photograph 1: Sand Road property (view from entrance).



Photograph 2: Sand Road property.



Photograph 3: Sand Road property.



Photograph 4: Sand Road property.